IN THE CLAIMS:

Amendments to the Claims

Please amend claims 3, 4 and 7 and add the new claims as shown below.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 and 2 (canceled)

3. (currently amended) In a plasma processing method in which a wafer is mounted on an upper member of a stage disposed within a vacuum chamber, the stage including a cooling jacket with a path disposed at an interior thereof for passing coolant liquid therethrough and the upper member being attached on the cooling jacket, the upper member including a heater and an electrode for an electrostatic chuck being disposed at an interior thereof, wherein the wafer is mounted on the upper member of the stage and processed by using plasma formed in the vacuum chamber above the stage, the plasma processing method comprising the steps of:

transferring the wafer to a position corresponding to the upper member of the stage;

holding the wafer at the position corresponding to the upper member of the stage for a predetermined time period without mounting the wafer on the upper member of the stage; and

mounting the wafer on the upper member of the stage so as to enable processing of the wafer which is mounted on the upper member of the stage by using the plasma in the vacuum chamber.

4. (currently amended) A plasma processing method as claimed in claim 3, wherein the step of holding includes preheating of the wafer while supporting the wafer ~~on~~ with respect to the stage without mounting the wafer on the upper member of the stage.

5. (previously presented) A plasma processing method as claimed in claim 3, wherein the upper member of the stage is a ceramic plate.

6. (previously presented) In a plasma processing method in which a wafer is mounted on an upper member of a stage disposed within a vacuum chamber, the stage including a cooling jacket with a path disposed at an interior thereof for passing coolant liquid therethrough and the upper member being attached on the cooling jacket, the upper member including a heater and an electrode for an electrostatic chuck being disposed at an interior thereof, wherein the wafer is mounted on the upper member of the stage and processed by using plasma formed in the vacuum chamber above the stage, the plasma processing method comprising the steps of:

transferring the wafer to a position corresponding to the upper member of the stage;

holding the wafer at the position corresponding to the upper member of the stage for a predetermined time period;

mounting the wafer on the upper member of the stage;

processing the wafer which is mounted on the upper member of the stage using the plasma in the vacuum chamber;

transferring the wafer after having been processed to a buffer room;

cooling the wafer within the buffer room; and

transferring the wafer thus cooled out of the buffer room.

7. (currently amended) A plasma processing method as claimed in claim 6, wherein the step of holding includes preheating of the wafer while supporting the wafer ~~on~~ with respect to the stage without mounting the wafer on the upper member of the stage.

8. (previously presented) A plasma processing method as claimed in claim 6, wherein the upper member of the stage is a ceramic plate.

9. (new) A plasma processing method as claimed in claim 3, wherein the step of mounting includes contacting a substantial portion of a surface of the wafer with a substantial portion of a surface of the upper member of the stage and holding the wafer on the upper member of the stage while effecting plasma processing of the wafer.

10. (new) A plasma processing method as claimed in claim 4, wherein the preheating of the wafer without mounting the wafer on the upper member of the stage is effected so as to suppress damage to the wafer due to a temperature difference between the wafer and the stage.

11. (new) A plasma processing method as claimed in claim 6, wherein the step of mounting includes contacting a substantial portion of a surface of the wafer with a substantial portion of a surface of the upper member of the stage and holding the wafer on the upper member of the stage while effecting plasma processing of the wafer.

12. (new) A plasma processing method as claimed in claim 7, wherein the preheating of the wafer without mounting the wafer on the upper member of the

stage is effected so as to suppress damage to the wafer due to a temperature difference between the wafer and the stage.

13. (new) A plasma processing method as claimed in claim 6, wherein the step of cooling the wafer within the buffer room includes supplying cooling gas to the buffer room for cooling the wafer.

14. (new) A plasma processing method as claimed in claim 13, wherein the cooling gas is nitrogen.